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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,034	03/02/2004	Takayuki Ishikawa	2004_0195A	9753
513	7590	10/04/2005	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P.			OLANDER, GABRIEL D	
2033 K STREET N. W.			ART UNIT	
SUITE 800			PAPER NUMBER	
WASHINGTON, DC 20006-1021			2879	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/790,034	Applicant(s) ISHIKAWA ET AL.	
	Examiner Gabriel D. Olander	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-19, 21-23 and 29-36 is/are rejected.
- 7) ☒ Claim(s) 20 and 24-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Electroluminescent element comprising electrically coupled shield layer.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17-19, 21-23, & 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Mental (US 4,617,195).

Claim 17: Mental discloses an EL element comprising:

a light-transmitting and insulating substrate (fig. 7, 12) having a main part and an outer connecting part protruding from said main part to allow for connection to an electronic device (shown fig. 3);

a first electrode provided on said substrate (fig. 7, 14), said first electrode including a first electrode part provided on said main part of said substrate, and a first electrode terminal extending from said first electrode part onto said outer connecting part (fig. 3, 24);

a light-transmitting electrode layer formed on said substrate and being electrically coupled with said first electrode part (fig. 7, 14);

a light emitting layer formed on said light-transmitting electrode layer (fig. 7, 15);

a dielectric layer formed on said light emitting layer (fig. 7, 32);

Art Unit: 2879

a backside electrode layer formed on said dielectric layer (fig. 7, 38);

a second electrode electrically coupled to said backside electrode layer (fig. 7, 26), said second electrode including a second electrode terminal extending from said backside electrode layer onto said outer connecting part (fig. 3, 22);

an insulating layer formed on said backside electrode layer (fig. 7, 32) and on portions of said light-transmitting electrode layer not covered by at least one of said light emitting layer, said dielectric layer and said backside electrode layer; and

a shielding layer formed on said insulating layer (fig. 7, 38);

wherein one of said light-transmitting electrode layer and said backside electrode layer is electrically coupled with said shielding layer (lines 47-54, column 5)

Claim 18: Mental discloses the EL element of claim 17, wherein said light-transmitting electrode layer is formed on said substrate so as to cover substantially all of said substrate or substantially all of said substrate except said outer connecting part (fig. 1, 14).

Claim 19: Mental discloses the EL element of claim 17, wherein at a peripheral part of said substrate, a non-luminous part is formed, said non-luminous part having no light emitting layer, no dielectric layer and no backside electrode layer formed on said substrate (shown fig. 18);

a hole is formed through said insulating layer at said non-luminous part and penetrates from said shielding layer to said light-transmitting electrode layer; and a conductive material is provided in said hole to form a connecting portion that couples said light-transmitting electrode layer with said shielding layer (lines 47-54, column).

Art Unit: 2879

Claim 21: Mental discloses the EL element of claim 19, wherein said outer connecting part protrudes from said main part of said substrate and electrode terminals are provided on said main part of said substrate and extend from said light-transmitting electrode layer and said backside electrode layer to said outer connecting part (shown fig. 3).

Claim 22: Mental discloses the EL element of claim 19, further comprising A second insulating layer covering an upper surface of said shielding layer (fig. 7, 42).

Claim 23: Mental discloses the EL element of claim 19, wherein said light-transmitting electrode layer is formed on said substrate so as to cover substantially all of said substrate or substantially all of said substrate except said outer connecting part (fig. 1, 14).

Claim 34: Mental discloses the EL element of claim 17, wherein said outer connecting part protrudes from said main part of said substrate and electrode terminals are provided on said main part of said substrate and extend from said light-transmitting electrode layer and said backside electrode layer to said outer connecting part (shown fig. 3).

Claim 35: Mental discloses the EL element of claim 34, further comprising a second insulating layer covering an upper surface of said shielding layer (fig. 7, 42).

Claim 36: Mental discloses the EL element of claim 17, further comprising

a second insulating layer covering an upper surface of said shielding layer (fig. 7, 42).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mental (US 4,617,195) in view of Kitai (US 5,585,695).

Claims 29-30: Mental discloses all the limitations of said EL element of claim 17 further comprising a conductive material provided to form a connecting portion that couples said backside electrode layer with said shielding layer (lines 47-54, column 5).

Mental does not disclose a hole formed in said insulating layer at a luminous part at which said light emitting layer, said dielectric layer and said backside electrode layer are formed in order to make a connection with the electrode.

Kitai discloses an EL element in which a hole formed in said insulating layer at a luminous part at which said light emitting layer, said dielectric layer and said backside electrode layer are formed (shown fig. 1) in order to make a connection with the electrode (fig. 1, 26 & lines 4-13, column 2) and thus avoid the need for edge connections and edge sealing. The connecting material is a continuation of the electrode that formed the backside electrode, and thus, is an identical conductive material (fig. 1, 22).

The addition of the hole as taught by Kitai with the EL element as disclosed by Mental above would be obvious to one of ordinary skill in the art at the time of the invention so as to electrically couple the backside electrode.

Claim 31: Mental discloses the EL element of claim 29, wherein said outer connecting part protrudes from said main part of said substrate and electrode terminals are provided on said main part of said substrate and extend from said light-transmitting electrode layer and said backside electrode layer to said outer connecting part (shown fig. 3).

Claim 32: Mental discloses the EL element of claim 29, further comprising a second insulating layer covering an upper surface of said shielding layer (fig. 7, 42).

Claim 33: Mental discloses the EL element of claim 29, wherein said light-transmitting electrode layer is formed on said substrate so as to cover substantially all of said substrate or substantially all of said substrate except said outer connecting part (fig. 1, 14).

Allowable Subject Matter

Claims 20 & 24-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 20: The references do not show or suggest using an identical conductive material for said connecting portion and said shield layer.

Art Unit: 2879

Claims 24-28: The references do not show or suggest coupling the light-transmitting electrode layer with the shield layer through a hole formed in said insulating layer.

Contact Information

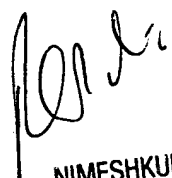
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabriel D. Olander whose telephone number is 571-272-6011. The examiner can normally be reached on 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

G.O.

Gabriel Olander
Patent Examiner
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